



## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

| APPLICATION NO.                       | FILING DATE                      | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------------|----------------------------------|----------------------|---------------------|------------------|
| 09/468,085                            | 12/21/1999                       | MINORU MIYATAKE      | Q57340              | 3194             |
| 75                                    | 90 11/06/2002                    |                      |                     |                  |
| SUGHRUE MION ZINN MACPEAK & SEAS PLLC |                                  | EXAMINER             |                     |                  |
| 2100 PENNSY<br>WASHINGTO              | LVANIA AVENUE N W<br>N, DC 20037 |                      |                     | DAVID Y          |
|                                       |                                  |                      | ART UNIT            | PAPER NUMBER     |
|                                       |                                  |                      | 2871                |                  |

DATE MAILED: 11/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.   | Applicant(s)  |     |  |  |  |
|---|---|---|-----|--|--|--|
| , Office Action Summans   | 09/468,085  | MIYATAKE ET AL.   |     |  |  |  |
| Office Action Summary   | Examiner  | Art Unit  |     |  |  |  |
|   | David Chung   | 2871  |     |  |  |  |
| - The MAILING DATE of this communication app<br>P∉iod for Reply   | ears on the cover   | r sheet with the correspondence address   |     |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status | 36(a). In no event, hower<br>within the statutory mini-<br>vill apply and will expire S<br>cause the application to | ever, may a reply be timely filed imum of thirty (30) days will be considered timely. SIX (6) MONTHS from the mailing date of this communication. become ABANDONED (35 U.S.C. § 133). |     |  |  |  |
| 1) Responsive to communication(s) filed on 08 A   | <u> August 2002</u> .   |   |     |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Th  | is action is non-fir  | nal.  |     |  |  |  |
| 3) Since this application is in condition for alloward closed in accordance with the practice under a Disposition of Claims   |   |   |     |  |  |  |
| 4) Claim(s) 1-13 is/are pending in the application  | ı <b>.</b>  |   |     |  |  |  |
| 4a) Of the above claim(s) is/are withdraw   | wn from considera   | ation.  |     |  |  |  |
| 5) Claim(s) is/are allowed.   |   |   |     |  |  |  |
| 6)⊠ Claim(s) <u>1-13</u> is/are rejected.   | 6)⊠ Claim(s) <u>1-13</u> is/are rejected.   |   |     |  |  |  |
| 7) Claim(s) is/are objected to.   | Claim(s) is/are objected to.  |   |     |  |  |  |
| 8) Claim(s) are subject to restriction and/or   | r election requirer   | ment.   |     |  |  |  |
| Application Papers  |   |   |     |  |  |  |
| 9)☐ The specification is objected to by the Examine   | r.  |   |     |  |  |  |
| 10) The drawing(s) filed on is/are: a) □ accept   | oted or b) Objecte  | ed to by the Examiner.  |     |  |  |  |
| Applicant may not request that any objection to the   |   |   |     |  |  |  |
| 11)☐ The proposed drawing correction filed on   | _is: a)∏ approve  | ed b) disapproved by the Examiner.  |     |  |  |  |
| If approved, corrected drawings are required in rep   | . •   | tion.   |     |  |  |  |
| 12) The oath or declaration is objected to by the Ex  | aminer.   |   |     |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120   |   |   |     |  |  |  |
| 13)⊠ Acknowledgment is made of a claim for foreigr  | n priority under 35   | 5 U.S.C. § 119(a)-(d) or (f).   |     |  |  |  |
| a)⊠ All b)□ Some * c)□ None of:   |   |   |     |  |  |  |
| <ol> <li>Certified copies of the priority document</li> </ol>   | 1. Certified copies of the priority documents have been received.   |   |     |  |  |  |
| 2. Certified copies of the priority document  | 2. Certified copies of the priority documents have been received in Application No                                  |   |     |  |  |  |
| <ul> <li>3. Copies of the certified copies of the prior</li> <li>application from the International Bu</li> <li>See the attached detailed Office action for a list</li> </ul>   | reau (PCT Rule 1  | 17.2(a)).   |     |  |  |  |
| 14) Acknowledgment is made of a claim for domesti   | c priority under 35   | 5 U.S.C. § 119(e) (to a provisional applicatio  | n). |  |  |  |
| <ul> <li>a) ☐ The translation of the foreign language pro</li> <li>15)☐ Acknowledgment is made of a claim for domest</li> </ul>   | · •   |   |     |  |  |  |
| Attachment(s)   | · ·   |   |     |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _   | 5) 🔲  | Notice of Informal Patent Application (PTO-152)   |     |  |  |  |

Application/Control Number: 09/468,085

Art Unit: \*\*\*

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Ouderkirk et al. (U.S. 5,825,543). Ouderkirk et al. discloses an optical film where the index of refraction of continuous and disperse phases are substantially matched along a first orthogonal axis and substantially mismatched along a second orthogonal axis. The indices of the two regions differ by no more than 0.03 in the matched regions and differ by at least 0.07 in the mismatched regions. This type of scheme provides a high degree of control in providing optical bodies of consistent and predictable high quality performance. See column 7, lines 30 – 37. The range claimed by applicant for the length of the dispersed liquid crystal polymer particles is very broad and virtually non-limiting. The length of conventional liquid crystal polymer particles is well within this range. Furthermore, the chemical composition of the thermoplastic liquid crystal polymer as recited in claim 2 was well known and obvious for showing liquid crystal characteristics within a predetermined temperature range as evidenced by the disclosure of Hiji et al. (U.S. 5,953,089). See column 4, lines 55-67 and note the

Application/Control Number: 09/468,085

Art Unit: \*\*\*

chemical formula of the liquid crystal polymer. It would have been obvious to one of

ordinary skill in the art at the time of invention to use this liquid crystal polymer in the

optical film of Ouderkirk et al. because it exhibits liquid crystal characteristics within a

specific temperature range.

Response to Arguments

Applicant's arguments with respect to claims 1-13 have been considered but are

moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to David Chung whose telephone number is (703) 306-

0155. The examiner can normally be reached on Monday-Friday from 8:30 am to 5:00

pm.

Kenneth Parker Primary Examiner GAU 2871

David Chung GAU 2871 11/04/02